Phone: 888-558-5227

651-644-8424

List Price

888-558-7329 Fax: Email: getinfo@lktlabs.com

Web: lktlabs.com

Product Information

Product ID C9710 CAS No. 4449-51-8

Chemical Name Spiro(9H-benzo(a)fluorene-9,2'(3'H)-furo(3,2-b)pyridin)-3-

ol, 1,2,3,3'a,4,4',5',6,6',6a,6b,7,7',7'a,8,11,11a,11b-

octadecahydro-3',6',10,11b-tetramethyl-,

Synonym 11-Deoxyjervine, 11-Deoxojervine, HSDB 3505.

Formula C₂₇H₄₁NO₂ Formula Wt. 411.62 Melting Point 212-215°C Purity ≥98%

Solubility Soluble in ethanol (≥20

mg/mL, methanol (0.7 mg/mL). Soluble in DMSO & insoluble in water.

Store Temp -20°C

100 mg C9710 500 mg Ship Temp Ambient C9710 1 g

Description Cyclopamine is a steroidal jerveratrum alkaloid found in Veratrum that binds Smo, inhibiting hedgehog (Shh) signaling pathways. Cyclopamine exhibits anticancer activity, decreases expression of Gli2 and Bcl-2, inhibiting proliferation and inducing apoptosis in adenoma cells and neuroblastoma cells.

> CYCLOPAMINE SOLUBILITY: Ethanol is the best cyclopamine solvent for biological use. A 2.8% solution (28 mg/mL) can be prepared by sonicating the cyclopamine in ethanol. Avoid over heating. Storage at -20 °C is recommended. If cyclopamine crystallizes out of solution: upon thawing, the mixture can be heated or sonicated again to redissolve the cyclopamine. Methanol and DMSO can also be used as cyclopamine solvents, but solubility in methanol is much less (0.7 mg/mL). Substantial heating is again needed to achieve solution with methanol or DMSO.

References Song M, Ou X, Xiao C, et al. Hedgehog signaling inhibitor cyclopamine induces apoptosis by decreasing Gli2 and Bcl2 expression in human salivary pleomorphic adenoma cells. Biomed Rep. 2013 Mar;1(2):325-329. PMID: 24648943.

> Xu L, Wang X, Wan J, et al. Sonic Hedgehog pathway is essential for neuroblastoma cell proliferation and tumor growth. Mol Cell Biochem. 2012 May;364(1-2):235-41. PMID: 22350753.

> Stanton BZ, Peng LF. Small-molecule modulators of the Sonic Hedgehog signaling pathway. Mol Biosyst. 2010 Jan;6(1):44-54. PMID: 20024066.

Bulk quanitites available upon request

5 mg

25 mg

Product ID Size

C9710

C9710

C9710

HO H